

Work Order ID: 61385

August 23, 2010 10:58:09 AM



Page 1

Item ID: D6101-001

Accept



Setup Start



Revision ID:

Item Name: Saddle Billet

Stop



Start Date: 8/23/10

Start Qty: 30.00



Cust Item ID:

Required Date: 9/03/10

Req'd Qty: 30.00



Customer:

Reference:

Approvals:

Process Plan: *CL*

Date: 10/8/23, Tooling:

Date:

Run Start



QC: _____

Date: _____

SPC (Y/N):

Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr	Revision Nbr
D6101	Rev B

100



PURCHASING

Purchasing

Memo

0.00

CL 10/8/23 30

Issue P/O: *12019*

- a) Description: Aluminum billet
- b) 6.00" x 6.250" x 2.00" thick
- c) Tolerance on length are +0.030"/-0.000" & +/-0.008"
- d) Grain direction along 6.00" length
- e) Material: 7075-T7351 (QQ-A-250/12)
- f) Material certification required

110



Receive & Inspect for Damage & Mat'l Certs

0.00

CL 10/9/3 30

Memo

0.00

Ensure material certification is attached

Packaging

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61385

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120



QC6- Inspect dimensions to drawing

0.00

MF 10/09/07

QC

Quality Control

Memo

0.00

130

Identify as per dwg & Stock Location: MAT

0.00

MF 10/09/07

Packaging

Packaging

Memo

0.00

30

0

140



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

10/09/08 MF

MF

10-9-8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

August 23, 2010 10:58:09 AM

Page 1

Work Order ID: 61385



Parent Item: D6101-001



Parent Item Name: Saddle Billet

Start Date: 8/23/10

Required Date: 9/03/10

Start Qty: 30.00

Required Qty: 30.00

Comments: IPP B: 01.05.04 New Issue EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-001P 		Purchased	No			110	Each	0.0000	1	30		CD 10/9/17	(30)

7075-T7351 2X6X6.25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

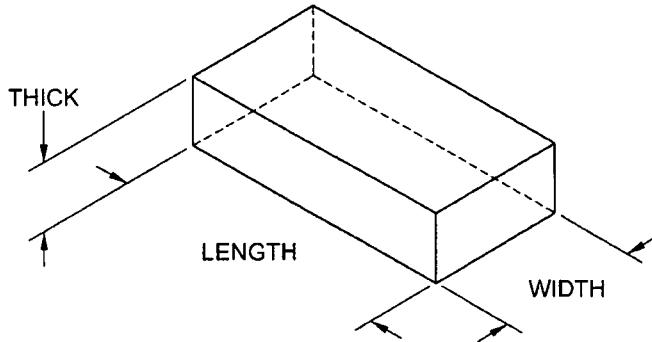
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.



ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12,
QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length



RELEASED
09/07/15/WP

CL1018123
W10.61385

B	ADDED D6101-015/-017, ADD ASTM B209			RF	09.04.23
A	NEW ISSUE			CP	01.03.30
REV.	DESCRIPTION			BY	DATE
DESIGN	CP	DART AEROSPACE LTD			
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA			
CHECKED	P4	DRAWING NO.	REV. B		
MFG. APPR.		D6101	SHEET 1 OF 1		
APPROVED	W	TITLE	SCALE		
DE APPR.		SADDLE BILLET, 7075	NTS		
DATE	09.04.23	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



Castle Metals®

A. M. Castle & Co.

PACKING SLIP

Page 1 of 1

				Shipment No:474379
Ship From: Castle Metals MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2	Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7	Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7	Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped 02-SEP-10	F.O.B. ORIGIN	Freight Terms Prepaid	Carrier MANITOULIN	BOL No 474379-2

Shipment Details		Final Destination Branch - MON	
-------------------------	--	---------------------------------------	--

Order No	Line No	Item No	Description					
950074	1	6857.MO	2.0000.PL.7075.T7351.ALUMINUM.48.5000.144.5000 CUT 2SIDED TO 6.25 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 6")) X 6 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 6")) - ALUMINUM PLATE SAW SPECIFICATIONS: QQ-A-250/12					
Purchase Order No	Part Number		Ordered Qty			Invoice Qty		
12019	YOUR ITEM NUMBER: D6101-001		30 PCS			30 PCS		
Details								
Delivery No.	Mill	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty (LBS)	
41482304		456750A9		30			232.25	

These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.							
We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.							
Reviewed by Authorized Castle Metals Representative:				Date:			

CD10/9/3

CD
10/9/07

SHIP TO:

AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

SOLD TO:

AM CASTLE & CO- SOLD TO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

KAISER
ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4149447

CUSTOMER PO NUMBER:		WORK PACKAGE:	CUSTOMER PART NUMBER:		SHIP RUN/LOAD ID:	GOVT CONTRACT NUMBER:
01-15905			6857 A97075-60		101432/18	
KAISER ORDER NO:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:
1075544	1	11-DEC-2008	7075	BARE	T7351	MILL FINISH PLATE
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	GAUGE:	WIDTH:	LENGTH:	
5732 LB	4 PCS EST.	2020668	2.0000 IN	48.500 IN	144.500 IN	

Certified Specifications

AMS 4078/RevG

AMS-QQ-A-250/12

AMS-STD-2154

ASTM B 209/Rev07

ASTM B 584/Rev06

BAC 5439/RevH

BSS 7056/RevA

CMMP 025/RevR

CSTI 008/RevC

DPS 4.713/RevAH

EAC MS1011/RevE

GAMPS 9101/RevB

G8816100/RevG/Amd1

MMS 159/RevN

PS 21211/RevK

Test Code: 4297

Test Results

Lot: 456514AB Cast 198

Drop 21

Ingot 1

(ASTM E6/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.2 : 73.8 (505 : 509)	63.6 : 84.9 (439 : 447)	11.6 : 11.8

(ASTM E1004)

Conductivity % IACS :	41.2 Min	41.7 Max
(MS/M) :	23.9 Min	24.2 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.08	0.21	1.6	0.03	2.4	0.19	5.7	0.03	0.01	0.01	TOT 0.05

JK 10/09/07



Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4149447

Lot: 456750A9 Cast 198 Drop 20 Ingot 1

(ASTM E8/8667)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.1 : 73.7 (504 : 508)	62.7 : 63.4 (432 : 437)	11.9 : 12.1

(ASTM E1004)

Conductivity %IACS :	41.8 Min	42.2 Max
(MS/M):	24.2 Min	24.5 Max

(ASTM E1251)

Chemistry:	Si	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.08	0.22	1.4	0.02	2.4	0.20	5.7	0.03	0.01	0.01	TOT 0.05

ALLOY LIMITS

Chemistry:	Si	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

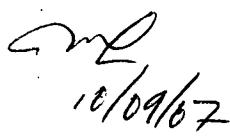
Aluminum Remainder

TEST NOTES

7075-T7351 plate 3.001-3.500" thick, if ultrasonically inspected, meets requirements of CMMP025 per SDR

CMMP025-KaiserT-1. 7075-T7351 plate 3.501-5.000" thick, if ultrasonically inspected, meets requirements of CMMP025 per SDR CMMP025-KaiserT-2.

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.


 10/09/07
 DATE RV'D
 IAC
 APPROVED BY


CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS CROSSL WAS MELTED IN THE UNITED STATES OF AMERICA OR A QUALIFYING COUNTRY PER DFARS 225.872-16, WAS MANUFACTURED IN THE UNITED STATES OF AMERICA, AND MEETS THE REQUIREMENTS OF DFARS 252.226 FOR DOMESTIC CONTENT. THIS MATERIAL HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW, 18U.S.C.2000 CERTIFIED.

BILL POYNOR, LABORATORIES SUPERVISOR



